The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~Method for handling gas diffusion of airships and other balloons to clean gases diffused through envelopes of airships and other balloons, characterized by that,~~
~~the envelope of gas container spaces, in given case airships, lifting balloons and hose-containers is appropriately structurized in addition to the traditional passive separation by one or more separator spaces and in said envelope, certain methods in connection with or without the layers of the material membrane of the envelope, influencing gas diffusion are operated intermittently or continuously in an active way~~
A method for handling gas diffusion through an envelope of an airship or balloon or hose-container, wherein the envelope is a multilayer envelope comprising at least one separator space, the method comprising,

separating gases to their components which gases have penetrated from a gas container space and from surrounding air into the at least one separator space,

and

I) returning the separated gases back to their initial sources, and/or

II) applying electrical gas diffusion inhibition to at least one layer of a material membrane forming the at least one separator space.

2. (Currently Amended) A method according to claim 1, wherein gases penetrated into the at least one separator space are separated by disjunctive separation ~~Method according to claim 1 characterized by that gases diffused into the multi-layer bordering structure of the envelope are separated by a disjunctive separation, during which the gases having penetrated into the separator space are separated from the mixture of these separator spaces by physical and/or chemical action and forwarded back to their sources.~~

3. (Currently Amended) A method according to claim 1, wherein the separated gases are piped into a fuel cell ~~Method according to claim 1 characterized by that the gases having penetrated into the separator space or spaces – even in small quantities reduced by EDI (Electrical Diffusion Inhibitor) – forming compounds there, are extracted, separated and~~

~~forwarded back to their sources, by well-known, suitably adapted gas-handling methods and equipment, or in an other way, for example by piping them into a fuel cell are utilized.~~

4. (Cancelled)

5. (Currently Amended) A method according to claim 1, wherein the envelope is an active isolation envelope and contains three separator spaces, and wherein the gas container space is filled with helium,
or
wherein the envelope is a null-diffusion envelope and contains two separator spaces, and wherein the gas container space is filled with hydrogen and/or helium ~~Method according to claim 1 characterized by that, in case of active isolation envelope structure three separator spaces are applied and the lift space is filled with helium~~.

6. (Currently Amended) A method according to claim 1, wherein at least one of the layers of the envelope ~~Method according to claim 1 characterized by that, during the method electrical gas diffusion inhibitor (EDI) is applied, which is a physical effect in the layers of the material membrane, which is able to decrease absorption and penetration of gases in these layers, in given case it~~ is a static and/or alternating current potential space, optionally a gas diffusion inhibitor and optionally applying gas absorption and/or gas penetration.

7. (Cancelled)

8. (Currently Amended) A method according to claim 1, wherein ~~Method according to claim 1 characterized by that, there is~~ vacuum gas-compound extraction is performed in at least ~~in minimum~~ one of the separator spaces.

9. (Currently Amended) A method according to claim 1, wherein a ~~Method according to claim 1 characterized by that, there is~~ basic compound gas of positive or negative pressure is applied as intermediate gas-trap in at least ~~minimum~~ one of the separator spaces.

10. (Currently Amended) A method according to claim 1, wherein gases penetrated into the at least one separator space are separated by ~~Method according to claim 1 characterized by that gases having penetrated into any of the separator spaces, forming there compounds are separated by separating methods (disjunctive separation), for example~~ adsorption, chemo-sorption, perm-selective membranes, liquefaction, or fractional distillation.

11. (Cancelled)

12. (Currently Amended) A multi-layer gas isolation envelope of an airship or balloon or hose-container ~~Envelope structure according to claim 1~~ for handling gas diffusion, comprising

at least one separator space, and

I) a gas separating apparatus, an inlet of which is connected to at least one separator space, and an outlet of which is connected to a gas container space allowing the return of a separated gas to the gas container space, and another outlet of which is connected to the surrounding air, and/or

II) an electrical gas diffusion inhibitor in or on at least one layer of a material membrane forming the at least one separator space

~~of airships and other balloons primarily for applying method, said envelope structure of gas spaces of balloons filled with diffusible gas filling, for example airships, lifting balloons and hose-containers has a bordering space,~~

~~characterized by that,~~

~~the diffusion-free envelope is a multi-layer gas isolation envelope, which has inner and outer isolation layers and among the said layers there is minimum one gas isolation separator space~~.

13. (Currently Amended) An envelope according to claim 12, wherein in the envelope there are three isolation material layers and these layers constitute two, an inner and an outer separator spaces, thereby the layers forming a multi-layer closed envelope around a gas container space, and an inlet of the gas separating apparatus is connected to a gas compound outlets of the inner and outer separator spaces, and a gas feedback of the gas separating apparatus is connected to an outer separator space

~~Envelope structure according to claim 12 characterized by that there are three isolation layers as well as two separator spaces applied, which form a multi-layer closed envelope around the gas container/lift space from which the inner separator space with filling gas, the choice of material membrane, pressure, handling method etc. joins the gas container space and an outer separator space joins the surrounding air~~.

14. (Currently Amended) An envelope according to claim 12, wherein in the envelope there are four isolation material layers and these layers constitute three, an inner, an outer and an interval separator spaces, thereby the interval separator space is located between the inner and the outer separator spaces, and an inlet of the gas separating apparatus is connected to a gas compound outlets of the inner and outer separator spaces, and a gas feedback of the gas-separating apparatus is connected to the interval separator space ~~Envelope structure according to claim 12 characterized by that three separator spaces around the gas container space and four isolation layers forming the latter separator spaces are arranged in a way, that the third, interval separator space is between the two inner and outer separator spaces and join them~~.

15. (New) A method according to claim 1, wherein the envelope comprises two or more separator spaces to which a gas separator is attached, and wherein the gas in the gas container space is hydrogen and/or helium.

16. (New) A method according to claim 1, wherein the gas container space is filled with hydrogen, and wherein hydrogen is separated from the gases from the at least one separator space by a perm-selective membrane, optionally by conduction of the hydrogen through a glowing palladium membrane or by adsorption or chemo-sorption.

17. (New) A method according to claim 1, wherein the gas container space is filled with helium, and wherein the helium is separated from the gases from the at least one separator space in a way that other gas components are separated to achieve the helium as residuum gas.

18. (New) A method according to claim 1, wherein I), the separated gases are returned back to their initial sources.

19. (New) A method according to claim 1, wherein II) electrical gas inhibition diffusion is applied to at least one layer of a material membrane forming the at least one separator space.

20. (New) A multi-layer gas isolation envelope according to claim 12, which comprises I) a gas separating apparatus, an inlet of which is connected to at least one separator space, and an outlet of which is connected to a gas container space allowing the return of a separated gas to the gas container space, and another outlet of which is connected to the surrounding air.

21. (New) A multi-layer gas isolation envelope according to claim 12, which comprises II) an electrical gas diffusion inhibitor in or on at least one layer of a material membrane forming the at least one separator space.

22. (New) A method for handling gas diffusion during storage of a gas through an envelope of a gas storage container, wherein the envelope is a multilayer envelope comprising at least one separator space, the method comprising,

separating gases to their components which gases have penetrated from a gas container space and from surrounding air into the at least one separator space,

and

I) returning the separated gases back to their initial sources, and/or

II) applying electrical gas diffusion inhibition to at least one layer of a material membrane forming the at least one separator space.

23. (New) A method according to claim 22, wherein the gas is hydrogen fuel.